

WE CLAIM:

1. A method for colonizing a root-organ from a plant with a mycorrhizal fungus that comprises:
 - obtaining said root-organ from said plant;
 - growing said root-organ in a first culture medium;
 - removing a portion of said first culture medium in the proximity of at least one developing lateral root of said root-organ;
 - replacing said removed portion of said first culture medium with a portion of a second culture medium, wherein said second culture medium has been previously inoculated with said mycorrhizal fungus; and
 - allowing said at least one developing lateral root to grow through said portion of a second culture medium to contact said mycorrhizal fungus.
2. The method of claim 1, wherein said mycorrhizal fungus is an ectomycorrhizal fungus.
3. The method of claim 2, wherein said ectomycorrhizal fungus is *Tuber melanosporum*.
4. The method of claim 1, wherein said plant is a tree or a shrubby plant.
5. The method of claim 4, wherein said shrubby plant is a *Cistus*.
6. The method of claim 5, wherein said *Cistus* is *Cistus incanus*.
7. The method of claim 1, wherein said first culture medium and said second culture medium are solid culture media.

8. The method of claim 7, wherein said solid culture medium is minimal medium.
9. The method of claim 1, wherein said removed portion is a gel plug.
10. The method of claim 9, wherein said gel plug is a 8 mm diameter gel plug.
11. The method of claim 1, wherein said portion of said second culture medium is a gel plug.
12. The method of claim 11, wherein said portion of said second culture medium has shape and size similar to said removed portion.
13. Use of the methods of claim 1 to study *in vitro* the colonization of plant roots by a mycorrhizal fungus.
14. An *in vitro* model to study the colonization of plant roots by a mycorrhizal fungus, said model being obtained by the method according to claim 1.